

# Equipped with AEM® Dryflow™ Filter No Oil Required! INSTALLATION INSTRUCTIONS PART NUMBER: 21-8308

2004-05 JEEP Wrangler L4-2.4 w/o IAT Sensor C.A.R.B. E.O. # D-670-6

\* NOTE: Legal in California <u>only</u> for racing vehicles which may <u>never</u> be used upon a highway

	PARTS LIST	
Description	Qty.	Part Number
Air Filter Assy 2.75 X 9" Dry Ele	1	21-2029DK
Inlet Pipe, Wrangler 04 2.4I	1	2-83081
Heat Shield, Wrangler 04 2.4l	1	20-8308
Hose, Adapter 2.25/2.75"x3" Blk	1	5-227
Hose; 5/8"id X 10"l	1	5-7010
Mount,rubber 1" X 8mm	1	1228560
Zip Tie,8" Tree Push-mnt	1	1-127
Edge Trim; 1/16"Gap X 18"L	1	102504
Washer, 8mm Soft Mount	2	559960
Nut, M8 Hex Serrated	2	444.460.08
1/2' Bndhose Clamp,2.15-3.00"	1	9440
1/2" Bndhose Clamp,2.31-3.25"	1	9444
1/2" Bndhose Clamp,2.56"-3.50"	1	9448
Hose Clamp, 1 1/16" Narrow	2	4093-6

Read and understand these instructions <u>BEFORE</u> attempting to install this product. Failure to follow installation instructions and not using the provided hardware may damage the intake tube, throttle body and engine.

The AEM<sup>®</sup> intake system is a performance product that can be used safely during mild weather conditions. During harsh and inclement weather conditions, you must return your vehicle to stock OEM air box and intake tract configuration. Failure to follow these instructions will void your warranty.

#### 1. Preparing Vehicle

- a. Make sure vehicle is parked on level surface.
- b. Set parking brake.
- c. If engine has run in the past two hours, let it cool down.
- d. Disconnect the negative battery terminal.
- e. Raise the front of the vehicle with a jack. Refer to your owner's manual for proper jack and jack stand placement to properly support vehicle. Support your vehicle using properly rated jack stands before wheel removal or while work ing under the vehicle.

## NEVER WORK UNDER A VEHICLE WITHOUT USING JACK STANDS.

f. Do not discard stock components after removal of the factory system.

## 2. Removal of stock system



a. Factory air box system installed.



c. Unclip the two metal retaining clips on the air filter housing. Remove the air filter housing lid and air filter.



b. Disconnect the breather hose from the air filter housing.



d. Loosen the hose clamp on the throttle body.



e. Remove the nut securing the air filter housing to the engine.

## 3. Installation of AEM<sup>®</sup> intake system.



f. Remove the air filter housing from the engine compartment.

a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



b. Install the supplied rubber edge trim onto the heat shield and trim to fit.



d. Unplug the fan wiring harness from the fan.



c. Remove the bolt on the passenger side radiator support as shown.



e. Install the heat shield into the engine compartment and align the front mounting tab with the bolt removed in step 3c.



f. Align the hole on the bottom of the heat shield with the hole in the inner fender. Install the supplied M8 rubber mount into the hole as shown.



h. Reinstall the bolt removed in step 3c to secure the front of the heat shield. Plug the fan wiring harness back into the fan.



j. Check to be sure the intake pipe is free from debris. Install the AEM<sup>®</sup> intake pipe into the silicone coupler on the throttle body and secure using a #44 hose clamp.



g. Install the M8 washer and nut to the bottom of the rubber mount previously installed. This is done from inside the wheel well of the vehicle.



i. Install the supplied silicone coupler onto the throttle body and secure using a #40 hose clamp.



k. Align the intake pipe bracket with the rubber mount previously installed. Install the M8 washer and nut onto the rubber mount bracket.



I. Install the supplied 5/8" breather hose between the intake pipe nipple and the valve cover elbow using two 1-1/16" hose clamps.



n. Insert the tree mount zip-tie into the mounting tab on the back of the heat shield. Secure the zip tie to the radiator support beam and trim the excess plastic off.



Factory air box system installed



m. Install the AEM<sup>®</sup> air filter into the space behind the headlight. Push the air filter over the intake pipe until the stop in the air filter is reached. Install the #48 hose clamp to secure the air filter to the intake pipe.



o. Ensure the air filter is not touching any part of the vehicle. Position the AEM® intake system for best fitment. Tighten the hose clamps at the throttle body. Tighten the nut on the mounting bracket. Re-adjust the intake pipe if necessary.



AEM® intake system installed

## 4. Reassemble Vehicle

- a. Position the inlet pipes for the best fitment. Be sure that the pipes or any other components do not contact any part of the vehicle. Tighten the rubber mount, all bolts, and hose clamps.
- b. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them.
- c. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- d. Reconnect the negative battery terminal and start engine. Let the vehicle idle for 3 minutes. Perform a final inspection before driving the vehicle.

## 5. CARB Sticker Placement

a. The C.A.R.B. exemption sticker, (attached), must be visible under the hood so that an emissions inspector can see it when the vehicle is required to be tested for emissions. California requires testing every two years, other states may vary.

## 6. Service and Maintenance

- a. AEM Induction Systems requires cleaning the intake system's air filter element every 100,000 miles. When used in dusty or off-road environments, our filters will require cleaning more often. We recommend that you visually inspect your filter once every 25,000 miles to determine if the screen is still visible. When the screen is no longer visible some place on the filter element, it is time to clean it. To clean, purchase our Synthetic air filter cleaner, part number 99-0624 and follow the easy instructions.
- b. Use window cleaner to clean your powder coated AEM<sup>®</sup> intake tube.
  NOTE: DO NOT USE aluminum polish on powder coated AEM<sup>®</sup> intake tubes.

## **AEM Air Intake System Warranty Policy**

AEM<sup>®</sup> warrants that its intake systems will last for the life of your vehicle. AEM will not honor this warranty due to mechanical damage (i.e. improper installation or fitment), damage from misuse, accidents or flying debris. AEM will not warrant its powder coating if the finish has been cleaned with a hydrocarbon-based solvent. The powder coating should only be cleaned with a mild soap and water solution. Proof of purchase of both the vehicle and AEM intake system is required for redemption of a warranty claim.

This warranty is limited to the repair or replacement of the AEM part. In no event shall this warranty exceed the original purchase price of the AEM part nor shall AEM be responsible for special, incidental or consequential damages or cost incurred due to the failure of this product. Warranty claims to AEM must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser of product and is nontransferable. Improper use or installation, use for racing, accident, abuse, unauthorized repairs or alterations voids this warranty. AEM disclaims any liability for consequential damages due to breach of any written or implied warranty on all products manufactured by AEM. Warranty returns will only be accepted by AEM when accompanied by a valid Return Merchandise Authorization (RMA) number. Credit for defective products will be issued pending inspection. Product must be received by AEM within 30 days of the date RMA is issued.

If you have a warranty issue, please call (800) 992-3000 and our customer service department will assist you. A proof of purchase is required for all AEM warranty claims.